**College of Environmental Science and Engineering**

**RESEARCH PROJECT ETHICAL ISSUES CHECKLIST UNDERGRADUATE, OR TAUGHT POSTGRADUATE**

To assist with record keeping, please name your checklist files according to the following format: “**Ethics\_[surname]\_[year]”.** Students should complete this ethical checklist for all research projects and discuss with their supervisor.

It is your responsibility to follow the University’s Research Ethics Policy, the General Data Protection Regulation, and any relevant academic or professional guidelines in the conduct of your study[[1]](#footnote-2). It is also your responsibility to ensure that you have all necessary permits to conduct your research. Any significant change to the project over the course of the research MUST be notified to your supervisor who will advise whether you need to complete updated forms for review.

|  |  |  |
| --- | --- | --- |
| **A. Research involving people or biological samples from people** | **YES** | **NO** |
| Does the proposed research involve human participants, biological samples from humans, or personal data about people?  *This includes any form of social research (interviews, surveys, observations, data dredging from social media etc.)* | ✔ |  |
| **B. Research on live animals** | **YES** | **NO** |
| 1. Does the proposed research involve live vertebrates or cephalopods? |  | ✔ |
| 1. Does the proposed research involve live invertebrates? |  | ✔ |
| **C. Importing material into the UK** | **YES** | **NO** |
| Will the proposed research involve the import of material (plants, animal, soil or sediments) from outside the UK? |  | ✔ |

|  |  |  |  |
| --- | --- | --- | --- |
| **Permission to conduct your research** | **YES** | **NO** | **N/A** |
| Please confirm you have all required permission to conduct your research (including permission from land owners to access land). Please note it is your responsibility to ensure all permits and permission is obtained. | ✔ |  |  |

If you answered ‘NO’ in ALL of sections A B and C, please keep this form on file as it may need to be referred to when you submit your thesis or results for publication. If you answer ‘yes’ in ANY of sections A, B, or C, further details of your project are required.

**Please provide general information on your project**

|  |  |  |
| --- | --- | --- |
| *Project title:* | |  |
| Determining the volume and diversity of deadwood in Snowdonia National Park and the factors that influence implementation of deadwood policy | |  |
| *Proposed start date:* | |  |
| May 24th 2021 | |  |
| *Proposed end date:* | |  |
| July 30st 2021 | |  |
| *Funding body (if applicable):* |  |  |
| Some funds for mileage may be acquired by Celtic Rainforest Wales |  |  |
| *Name of student (applicant):* |  |  |
| REDACTED |  |  |
| *Email address:* |  |  |
| REDACTED |  |  |
| *Degree name:* |  |  |
| REDACTED |  |  |
| *Supervisor’s name:* |  |  |
| REDACTED |  |  |
| *Supervisor’s signature:* |  |  |
| REDACTED |  |  |

1. **Research involving human participants, biological samples from people, or data about people (please complete if you ticked yes in box A)**

|  |  |  |  |
| --- | --- | --- | --- |
| *This section determines whether your study raises more complex issues which requires ethical review**by CESE Ethics Committee.* | | **Yes** | **No** |
| 1 | Will the research collect or handle information about identified, or identifiable, individuals?1 | ✔ |  |
| 2 | Does the research involve vulnerable groups – for example, children and young people, vulnerable adults, such as those with a learning disability or cognitive impairment, or individuals in a dependent or unequal relationship? |  | ✔ |
| 2b | If Yes, the researcher must check whether a Disclosure and Barring Service (DBS) check is required (replaces CRB check), e.g. this is often required for research in schools in the UK. Please confirm if it is required. |  | ✔ |
| 3 | Will the research involve discussion of sensitive topics (e.g. illegal behaviour -including resource use which breaks local rules, trade-union membership, political views, health, religion, sexual orientation, ethnic status, genetic data)?2 |  | ✔ |
| 4 | Will the study require the co-operation of a gatekeeper or contact person (e.g. local elder, committee chair, group leader) for initial access to the groups or individuals to be recruited? | ✔ |  |
| 5 | Will the research involve conducting interviews with experts or a professional group?3 | ✔ |  |
| 6 | Will the researcher collect data through an online survey?4 |  | ✔ |
| 7 | Will the research necessarily involve deception or be conducted without participants’ full and informed consent at the time the study is carried out (e.g. covert observation of people in non-public places, analysis of social media data)? |  | ✔ |
| 8 | Will the study involve intrusive interventions (e.g. administration of drugs or other substances, hypnotherapy, vigorous physical exercise) or induce psychological stress, anxiety, humiliation or pain? |  | ✔ |
| 9 | Does the research require review by an NHS Research Ethics Committee?  *If Yes, the research should be submitted to the NHS Ethics Committee in the first instance.* |  | ✔ |
| 10 | Will the research involve the collection or storage of human tissues (defined as any material containing human cells i.e. including blood, urine and saliva)?  *If yes, the research will need review by the university ethics committee.5* |  | ✔ |

*1 If yes then the GDPR will apply. Please see* [*https://www.bangor.ac.uk/governance-and-compliance/dataprotection/documents/Data-Protection-Policy-approved-v7-June-2020.pdf*](https://www.bangor.ac.uk/governance-and-compliance/dataprotection/documents/Data-Protection-Policy-approved-v7-June-2020.pdf)

*We discourage students on taught programs from conducting research which comes under General Data Protection Regulation as the data is subject to strict control. Such projects will not be approved except in special circumstances (e.g. the project is part of a larger piece of research)*

*2 Holding sensitive information (known as ‘special category data’) about identifiable individuals is particularly problematic. We suggest researchers avoid collecting individually identifying information if they are studying sensitive issues. Please see the university’s data protection policy for more information* [*https://www.bangor.ac.uk/governance-and-compliance/dataprotection/documents/Data-Protection-Policy-approved-v7-June-2020.pdf*](https://www.bangor.ac.uk/governance-and-compliance/dataprotection/documents/Data-Protection-Policy-approved-v7-June-2020.pdf)

*3This would include but is not limited to academics, farmers, fishers, foresters, conservation professionals and policy makers. We generally discourage students on taught programs from conducting such research. Such projects will not be approved except in special circumstances (e.g. the project is part of a larger piece of research, you are on a part-time study program and the research occurs in your own professional field).*

*4 Online surveys must be set up in such a way as to ensure they are not unintentionally collecting personal information (IP address etc). For more information, consult the CoESE Research ethics website.*

*5 Any research involving human tissues much be reviewed by the central university committee https://www.bangor.ac.uk/governance-and-compliance/documents/research-ethics-policy-en.pdf*

**If the answer to all of the above questions (Part A) is NO, then skip the Research Outline, and please fill out the checklist below about your survey, get this signed off by your supervisor and keep this form on file as it may need to be referred to when you submit your thesis or results for publication.**

**If the answer to any of the above questions (Part A) is YES, then please fill out the Research Outline below as well as the detailed Checklist at the end and collate the supporting documentation (e.g. survey instruments, participant information and consent sheet).** Discuss this with your supervisor and get their approval, then submit to your module organizer.

**RESEARCH OUTLINE**

You can copy from your research proposal and adjust. Please keep in mind we want you to be transparent about your research, and for you to consider potential ethical implications of your research and how you plan to avoid potential risks.

*Briefly outline and provide a justification of your proposed research and the research questions. If your research contains a variety of methods, for example only part relates to collecting or handling data about people, please point this out.*

One important component of a healthy forest is the volume and diversity of deadwood present. However, many forests in the UK do not contain the recommended volume of deadwood suggested in forest policies. A survey is being funded in Snowdonia National Park to determine the status of deadwood across ancient woodlands in order to make recommendations to improve the quantity or quality of deadwood if required. However, conducting an ecological survey will not provide information on why policies have or have not been implemented. Therefore, understanding the perspective of forest managers on how policies are interpreted and barriers to their implementation is also important to provide useful recommendations to improve deadwood in Snowdonia National Park.

The aim of this study is to combine ecological and social data to determine not only the status of deadwood in Snowdonia National Park, but also how forest managers perceive deadwood policies and any barriers to their successful implementation. This can be used to make recommendations on the amount of deadwood that should be added and in what forms, in addition to identifying and addressing potential barriers. The objectives for this research are therefore to address the following questions:

1.1 What is the volume and diversity of deadwood in various forest types in Snowdonia National Park?

1.2 Do these meet policy recommendations?

2.1 How do forest mangers interpret forest policies in regards to deadwood management and translate them into practices in the field?

2.2 How do individual, contextual, organizational, or political factors, or external actors influence deadwood management in the field?

2.3 Are any of these factors barriers to successful implementation of deadwood policies?

The questions in part one will consist of ecological data collection in the field. Part two will entail data collection from people and therefore require ethical approval.

Please see page 14 for the full research proposal.

*Identify the target population and sampling design (how the target population will be sampled):*

In the case of forest management in Snowdonia National Park, there is diverse range of forest owners and forest managers. The entire target population is therefore anyone who has direct involvement in planning and carrying out of forest management activities in a forest or woodland (considered synonymous) in Snowdonia National Park. This includes representatives from The Woodland Trust, National Trust, Natural Resource Wales, Snowdonia National Park, private contractors, forestry consultants, and private owners who manage their own forest. It is assumed that these managers have the role of interpreting forest policy and translating these to practices in the field.

The goal is to conduct around 15 semi-structured interviews on Microsoft teams with various forest managers in Snowdonia National Park. The questions used to guide the interview can be found in this document on page 12. A list of possible contacts will be drafted with the help of Adam Thorogood (from The Woodland Trust), who has comprehensive knowledge on the relevant forest managers. Possible interviewees will be contacted by email directly by Adam Thorogood with the researcher cc’d (the email will be drafted by both the researcher and Adam Thorogood). The email will request the recipient’s involvement and introduce the purpose of the research. The number of people contacted and the response rate will be recorded. Potential Interviewees will be sent the email once, and if no response is received, a follow-up email will be sent seven working days later. This will be an opportunistic sample, but the expectation is that there will be a range of respondents that will give a general insight to answer the research questions. The data will be analyzed qualitatively after note taking during the interviews.

*Define the potential benefits of the research (outline whether and how the research might be used beyond the dissertation (impact)):*

Discussions with stakeholders involved in forestry and conservation in Wales have revealed how these results will be impactful beyond the completion of the researcher’s Masters dissertation. First, the results may be utilized by the Woodland Trust in the upcoming report on the status of deadwood in Snowdonia National Park and recommendations to improving deadwood management. It has also been noted by a representative from Celtic Rainforest Wales that although grants for projects have been largely focused on forest expansion, this research could provide a base for projects that focus on similarly important forest restoration. Additionally, if a financial barrier to deadwood is discovered, this research could be important in the discussion on changes to future land management schemes to promote deadwood through financial incentive. Furthermore, if it is discovered that polices are not clear to understand and implement in the field, communication with the FSC about this research has lead to a discussion that the results can help inform changes to the upcoming UKWAS 5, for which public consultations are occurring in October and November 2021. Finally, following the completion of this project, effort will be made to distribute the results to appropriate stakeholders. This includes offering a seminar on the results and notifying by social media potentially through the platforms of The Woodland Trust and Celtic Rainforest Wales. If deadwood is not sufficient after decades of research demonstrating its importance, and barriers to policy implementation are discovered, this knowledge will be shared to help improve the situation in Snowdonia National Park.

*Please describe what information will be provided to participants about data storage and use, how consent will be recorded and how data will be stored and eventually destroyed:*

Attached to the email sent to potential participants will be the participant information sheet with the consent form (see page 13 of this document). The participant information sheet contains information on the purpose of the research, what to expect during the interview, how the data will be stored, used, and destroyed, and contains a consent form. Following ethical approval, the Bangor University Translation Service will translate the participant information sheet into Welsh. If the contacted person agrees to an interview, consent will be obtained from the participant by returning the signed consent form. Alternatively, before the interview commences, I will read through the participant information sheet and receive and record oral consent from the participant.

The data collected from the interviews will be identifiable but confidential. This means that due to the limited population size in this survey and detail from the interview, participants will potentially be identifiable from the data. For extra caution, the interview notes and recordings will be identified only by a code with personal details stored separately. To keep the data safe, the interview notes, recordings, and personal details will be kept in a password-secure computer with access only by the researcher and will not be shared with anyone else. The recorded interviews will only be kept for the duration of the research study and will be permanently deleted once the study is complete in September 2021. The information obtained will be published in a Masters dissertation and may contribute to repots, but names will not appear in any public document, nor will the results be published in a form that would make it possible for participants to be identified. To ensure this, participants will be reported as being from one of the following groups: private forest owners, industry professionals, forest managers who work for environmental organizations, and forest managers who work for the government. When individual data is presented, such as quotations, the participants will only be acknowledged as being part of one of these groups.

*For each other item ticked in the checklist above, please explain the ethical issue at stake and how they will be addressed in your research.*

There are extra concerns for this research because identifiable information will be collected, a contact person will be used, and the study will involve interviewing professionals/experts.

The data collected from the interviews will be identifiable but confidential. This means that due to the limited population size in this survey, participants can possibly be identified from the interview data collected. For extra caution, the interview notes and recordings will be identified only by a code with personal details stored separately. To keep the data safe, the interview notes, recordings, and personal details will be kept in a password-secure computer with access only by the researcher and will not be shared with anyone else. The recorded interviews will only be kept for the duration of the research study and will be permanently deleted once the study is complete in September 2021. As previously stated, when individual data is presented the participants will only be acknowledged as being part of a group.

The second concern is the use of a contact person, as potential interviewees may interpret this as an obligation to participate in the interview. It will be clearly stated in the email sent to potential participants that even though they were contacted for the researcher with the help of the contact person, this in no way makes them responsible to agree to the survey. The participant information sheet will also clearly state that participation is voluntary and there is no penalty to choosing not to take part in the survey.

Finally, this research will involve interviewing professionals, which needs special ethical approval. In order to ensure this research is acceptable, the survey instrument will be thoroughly checked in order to make sure it is appropriate. Additionally, the contact person from The Woodland Trust will ensure that the suitable people will be contacted. Lastly, this study has benefits outside of solely the completion of a Master dissertation that warrant its undertaking as shown by the support from The Woodland Trust and Celtic Rainforest Wales, as well as communication with other stakeholders.

The checklist below is to help you and your supervisor confirm you are ready to carry out your research. **NO PROJECT INVOLVING PEOPLE CAN START BEFORE YOUR SUPERVISOR HAS SEEN AND SIGNED OFF THE CHECKLIST BELOW and ACCOMPANYING DOCUMENTS (AND ETHICAL APPROVAL IS GRANTED IF NECESSARY). Please record Yes, No or Not Applicable (N/A) for each.**

|  |  |  |
| --- | --- | --- |
| **CHECKLIST** | **Student** | **Supervisor** |
| **Required Supporting documents** |  |  |
| A copy of the survey instrument(s) has been seen by the supervisor (and is attached if this research is being submitted to the ethics committee). | Yes | Yes |
| A copy of the participant information sheet and/or consent form has been seen by the supervisor (and is attached if this research is being submitted to the ethics committee). | Yes | Yes |
| The research questions are laid out (in accompanying proposal or in research outline above). | Yes | Yes |
| **1. Fit to research questions** |  |  |
| The research questions are precise and answerable. | Yes | Yes |
| The survey questions are necessary and sufficient to answer the research questions. | Yes | Yes |
| The form of data to be collected (scalar, ordinal, categorical or qualitative) has been considered, and will allow appropriate analyses to be conducted. | Yes | Yes |
| **2. Target population & sampling** |  |  |
| The target population is appropriate and necessary to answer the research questions. | Yes | Yes |
| The proposed sampling method is appropriate. | Yes | Yes |
| The proposed sample size is both achievable AND sufficient to answer the research questions. | Yes | Yes |
| **4. Ethics and consent** |  |  |
| The participant information sheet clearly states: |  |  |
| * the purpose of the research | Yes | Yes |
| * the approximate duration of the survey and what is required of participants | Yes | Yes |
| * whether data will be anonymous or confidential (and who will see the data), how it will be stored and for how long (and any possible reuse e.g. public archiving) | Yes | Yes |
| * the participant’s rights with respect to withdrawing their consent to hold and process data | Yes | Yes |
| * the name and contact details (usually email) of the researcher | Yes | Yes |
| The researcher has clear protocols for recording and storing consent. | Yes | Yes |
| **5. Piloting & proofing** |  |  |
| Plans for piloting are appropriate. | Yes | Yes |
| Survey instrument(s) and associated documents checked for spelling, grammar and clarity. | Yes | Yes |
| Survey questions are clear, with appropriate response options (if applicable) and arranged in a logical order. | Yes | Yes |
| Jargon is minimised and any necessary terminology is clearly defined. | Yes | Yes |
| The survey is an appropriate length, and not overly onerous to complete. | Yes | Yes |

Informant information sheet: Research Project on Deadwood in Snowdonia National Park Forests

**What is this research about?**

The purpose of this research is to investigate the factors that influence deadwood management and the implementation of relevant forest policies. This will be used to determine any barriers to deadwood management identified by those who manage the forests, in order to provide useful recommendations to improve deadwood condition. You are being invited to take part in a semi-structured interview because you are someone who is directly involved in managing a forest in Snowdonia National Park.

**Do I have to take part?**

No, taking part in this interview is voluntary. You can refuse to take part, and you can request to stop the interview anytime or decline to answer any of the questions.

**What will participation involve?**

We will arrange to meet via video or audio chat sometime between June 1st and July 9th 2021. I will ask a series of questions and we will have a free flowing conversation about the topics. The conversation will last between 30 minutes and one hour.

I will take notes during the interview, and if you consent it will be recorded. The recording will be used to extract anonymous quotations.

**How will my data be stored and used?**

Your data will be stored and used according to the General Data Protection Regulation (EU GDPR). The recording and notes from your interview will be identified by a unique code, with personal details stored separately. All data including the recording, notes, and personal details will be kept in a password-secure computer. Only I (and my supervisor) will listen to the recording and it will not be used for any purposes other than this research. The recorded interviews will be kept for the duration of this study and will then be permanently deleted. The information obtained will be published in a Masters dissertation and may contribute to reports, but your name will not appear in any public document, nor will the results be published in a form where you can be identified.

If you want to withdraw your consent for us to use your information, please get in touch before August 1st 2021.

This research has been reviewed by the Bangor University College of Environmental Science and Engineering Ethics Committee.

**Contact for further information:**

Researcher: xxx

Supervisor: xxxx

Please sign here and return this form to record your consent; alternatively, oral consent can be recorded at the start of the interview.

Signature of Participant ………………………………………………………………………………………….

Date ………………………………………………………………………………..……………………………………......

Project Ymchwil ar Goed Marw yng Nghoedwigoedd Parc Cenedlaethol Eryri

**Beth yw diben yr ymchwil hon?**

Diben yr ymchwil hon yw archwilio'r ffactorau sy'n dylanwadu ar reoli coed marw a gweithredu polisïau coedwigaeth perthnasol. Caiff ei defnyddio i ystyried unrhyw rwystrau i reoli coed marw a nodir gan rai sy’n rheoli’r coedwigoedd, er mwyn cynnig argymhellion defnyddiol i wella cyflwr coed marw. Fe'ch gwahoddir i gymryd rhan mewn cyfweliad lled-strwythuredig am eich bod yn rhywun sy’n cymryd rhan uniongyrchol mewn rheoli coedwig ym Mharc Cenedlaethol Eryri.

**A oes rhaid imi gymryd rhan?**

Nac oes, mae cymryd rhan yn y cyfweliad hwn yn wirfoddol. Gallwch wrthod cymryd rhan, a gallwch ofyn am ddirwyn y cyfweliad i ben ar unrhyw adeg neu wrthod ateb unrhyw gwestiwn.

**Beth fydd cymryd rhan yn ei olygu?**

Byddwn yn trefnu cyfarfod trwy gyfrwng fideo neu sain rywbryd rhwng 1 Mehefin a 9Gorffennaf 2021. Byddaf yn gofyn cyfres o gwestiynau ac yna cawn sgwrs rydd am y pynciau a godwyd. Bydd y sgwrs yn para rhwng 30 munud ac awr.

Byddaf yn cymryd nodiadau yn ystod y cyfweliad, ac os ydych yn cydsynio i hynny caiff y cyfweliad ei recordio. Cymerir dyfyniadau dienw o’r recordiad.

**Sut caiff fy nata ei ddefnyddio, ei gadw a'i ddiogelu?**

Bydd eich data yn cael ei gadw a'i ddefnyddio yn unol â'r Rheoliad Diogelu Data Cyffredinol (GDPR yr Undeb Ewropeaidd). Bydd y recordiad a'r nodiadau o'ch cyfweliad yn cael eu hadnabod trwy gòd unigryw, gyda’r manylion personol yn cael eu cadw ar wahân. Bydd yr holl ddata, gan gynnwys y recordiad, y nodiadau a'r manylion personol yn cael eu cadw ar gyfrifiadur wedi’i ddiogelu gan gyfrinair. Dim ond fi (a'm goruchwyliwr) a fydd yn gwrando ar y recordiad ac ni chaiff ei ddefnyddio at unrhyw ddiben ac eithrio'r ymchwil hon. Caiff y cyfweliadau a recordiwyd eu cadw dros gyfnod yr astudiaeth hon ac yna eu dileu yn barhaol. Cyhoeddir y wybodaeth a gesglir mewn traethawd Meistr a gall y traethawd gyfrannu at adroddiadau, ond ni fydd eich enw yn ymddangos mewn unrhyw ddogfen gyhoeddus, ac ni chyhoeddir y canlyniadau ar ffurf lle gellir eich adnabod.

Os ydych am dynnu eich cydsyniad i’r wybodaeth gael ei defnyddio yn ei ôl, cysylltwch â ni cyn 1 Awst 2021.

Mae'r project hwn wedi cael ei adolygu gan Bwyllgor Moeseg Coleg Gwyddorau'r Amgylchedd a Pheirianneg Prifysgol Bangor.

**Cyswllt am ragor o wybodaeth:**

Ymchwilydd: xxx

Goruchwyliwr: xxx

Llofnodwch yma a dychwelwch y ffurflen hon i gofnodi eich cydsyniad; fel arall, gellir recordio eich cydsyniad llafar ar ddechrau'r cyfweliad.

Llofnod y Cyfranogwr ………………………………………………………………..........................................................

Dyddiad: ………………………………………………………………………………..……………………………………...........

**Semi-Structured Interview Outline**

Background questions:

How much, and what types of forest do you manage in Snowdonia National Park?

What are your priorities for forest management in these forests?

What do you think is the value of deadwood?

Management questions and barriers:

Do you actively manage for deadwood either by retention or creation? If so, how?

Do you encounter challenges or barriers to deadwood retention or creation?

Do interactions with other actors, such as the public, scientists, or NGOs, have an impact on deadwood management, either positive or negative?

Questions about deadwood policies:

Are you aware of policies or reports that provide guidelines for deadwood management? If so, what are they?

What do you think is the value in having policies that guide deadwood management?

If they reference specific polices ask the following:

Do you think the policies are easy to understand and interpret what is suggested in terms of deadwood management?

Can you easily translate these recommendations into practices in the forest?

Do you feel that you have the power to influence these policies if you wanted?

If you could change the policies in any way, what would you suggest?

Do you think the volume of deadwood in the forests you manage, and in Snowdonia National Park in general, currently meet the policy recommendations?

Future

What do you believe are positive changes to help facilitate future deadwood management?

1. *For more, and the latest information, please check the Research Ethics page on the College of Environmental Sciences & Engineering (CoESE) Health and Safety Services website, or your dissertation handbook.* [↑](#footnote-ref-2)